

Approved Oct 25, 1999

U.S. Environmental Protection Agency
Science Advisory Board
Committee: Advisory Council on Clean Air Compliance Analysis (Council)

Summary Minutes of Public Teleconference
Date: October 15, 1999

Committee Members: (See Roster - Attachment A.)

Date and Time: 11:30 am-2:30 pm, October 15, 1999 (See Federal Register Notice - Attachment B).

Location: Ariel Rios North, Conference Room 6013

Purpose: To review the October draft of the Prospective Study in light of three major charge questions

Attendees: Chair: Dr. Maureen Cropper; Committee Members and Consultants: Drs. Don Fullerton, Lawrence H. Goulder, Lester B. Lave, Paul Lioy, Paulette Middleton, and Alan J. Krupnick. ; Other SAB Members and Consultants participating: Drs. Mort Lippmann; SAB Staff: Drs. Angela Nugent , Designated Federal Official, Don Barnes; Other Persons Attending: Mr. James DeMocker (EPA, Office of Air and Radiation), Dr. Brian Heninger (EPA, Office of Policy); Dr. Bryan Hubbell (EPA, Office of Air and Radiation); Dr. Al McGartland (EPA, Office of Policy and Reinvention); Ms. Doris Price (EPA, Office of Air and Radiation); Ms. Anne Watkins (EPA, Office of Air and Radiation); Dr. Jim Neumann (IEc); Dr. Henry Roman (IEc); Mr. Jim Wilson (Pechan Avanti); Dr. Leland Deck (ABT); Ted Holcombe (Pacific Gas and Electric); Cindy Longworthy (Hunton and Williams); Randy Lutter (AEI Brookings Center); Riz Monien (Ford); Rachel Urdman (Inside EPA); Jean Vernet (DOE); James Kennedy (BNA); Anne Smith (Charles River Associates); Lee Linden (CEA); Joe Aldy (CEA) and Kevin Neelan (OMB).

Meeting Summary:

Since Dr. Rick Freeman was unavailable for the meeting, the discussion skipped his presentation and then followed the issues and general timing as presented in the meeting Agenda (see Meeting Agenda - Attachment C). The teleconference lasted until 1:30 pm. There were written comments submitted to the Committee, and there was one written request to present public comments during the discussion.

Welcome and Introductions - Dr. Maureen Cropper, the Chair, opened the session at 11:30 a.m. welcoming members and consultants (Roster, Attachment A), and reviewed the agenda (Attachment C). Dr. Angela Nugent, Designated Federal Official (DFO) took roll.

Discussion of the October 12th draft Section 812 Study.

Discussion of the Agency's responses to SAB Council recommendations followed the order suggested by a response table provided by Agency Staff (Attachment D; 812 Prospective Project Team Responses to SAB Council Recommendations - October 13, 1999). Discussion of major changes proceeded as follows:

1. Council found change made to address uncertainties in the link between UV-b and melanoma appropriate.
2. Council did not endorse proposed treatment of cost-effectiveness, which did not present cost-per-life-year saved estimates of cost-effectiveness. The Chair commented that the Council had an interest in promoting comparability across Agencies in the cost per life year saved for different health and safety regulations. Council agreed to address this issue in the closure letter.
3. Council found changes made to exclude displaced cost estimates of benefits of reduced nitrogen deposition from primary central estimates appropriate.
4. Council found changes made to drop visibility benefits based on McClelland et al. study from the primary estimate appropriate.
5. Council suggested a change to the estimate of the potential cost impacts of tax interaction effects. Council members suggested the language that "tax interaction effects could amplify the costs by 30% or possibly more, depending on the nature of the regulation."
6. Council found that the revised text did not appropriately characterize the bias in cost estimates from omitting the tax interaction effect. The Council suggested that omitting tax interaction effects would understate costs, even if the increase in labor supply associated with health benefits were taken into account. The latter might lower the increase in costs associated with tax interaction effects, but would not change the sign of the effects. Mr. DeMocker recommended that the Council's transmittal letter include the rationale for addressing tax interaction effects in the context of the current Prospective Study, which focuses on direct costs and does not account for other social costs. He suggested that it would be helpful for the Council to provide an explanation of why the specific discussion of tax interaction effects was relevant in the context of a study that focuses on direct costs and why it was important for "real world applications."
7. The Council recommended that the text be further revised to clarify the

discussion of costs. It found the October draft text mischaracterized the direction of the bias that occurs when direct costs are used as a proxy for social costs. Council members agree that the reliance on direct costs should not be characterized as “conservative” or likely to overstate costs.

8. Council found changes made in the text to Chapter 8 “great” but identified issues with Table 8-5 and the Executive Summary. Issues included: appropriate characterization of cost uncertainties, whether to use textual, graphic or statistical devices to convey uncertainties. Consensus emerged on (1) modifying Table 8-4 to keep high and low rows, drop out cost numbers, insert text “not estimated” and acknowledge benefit/cost estimates less than 1 as “low” and greater than 8/1 as “high;” (2) replacing the figure in the Executive Summary that presents overall cost/benefit estimates and uncertainties with a table with information extracted from the revised Table 8-4 (excluding the present value columns).

The Council then addressed several issues characterized as “Minor” in the Agency Table, “Prospective Project Team Responses to SAB Council Recommendations - October 13, 1999” (Attachment D). They discussed the Agency’s reluctance to identify and highlight any potential uncertainties that may attend the contribution of nitrogen oxides (or nitrates) to premature mortality. Members of the Health and Ecological Effects Subcommittee agreed with the Agency’s position, that there was insufficient data to draw distinctions between different sizes of particulate matter and their different mortality effects. Alan Krupnick, a consultant to the Council, however, questioned the strength of the linkage between nitrates, PM_{2.5} and mortality. The Chair expressed the sense of the Committee that it was inappropriate to include a statement on uncertainty in the current Prospective Study.

The Council then opened the floor to public comments. Anne Smith from Charles River Associates was available to take questions regarding “Methods for developing benefit-cost ratios at the level of the individual Title of the Clean Air Act Amendments” (Attachment E). Alan Krupnick, a consultant to the Council, suggested that the Council reference the analysis as an example of what the Agency might do in the future. Paulette Middleton, Chair of the Air Quality Monitoring Subcommittee, characterized the effort as a screening level analysis that did not take the place of larger-scale integrated modeling, which can give a much clearer analysis for different parts of the country. Mr. DeMocker responded that the proposed approach involved simplifying assumptions that merited careful Council review and that the Agency expects that the proposed methodology would yield inaccurate and unreliable allocation estimates which could provide misleading estimates of the relative economic merits of the various Clean Air Act titles. Mr. DeMocker further responded that

proposals to allocate total costs and benefits by title for the purpose of comparing the economic merits of those titles face a very high burden of precision to avoid misleading policy conclusions. Ms. Anne Smith emphasized that her preliminary results were robust, given a wide range of assumptions. Mr. DeMocker then responded that the robustness of the results were only demonstrated by, and within, the particular parameters of her highly simplified model.

The meeting concluded with Council members deciding on a process to complete the Council Advisory.

The Chair proposed that the following writing assignments, to be completed by October 22, 1999 and posted to the SAB Discussion Database:

Comments on Current Draft

1. Presentation of cost-effectiveness results (Cropper/Krupnick)
2. Discussion of costs; characterization of direct costs and treatment of tax-interaction effects (Goulder)
3. Characterization of uncertainty with respect to cost estimates (Fullerton)

Suggestions to Improve Future Prospective Studies

1. Need to disaggregate benefits and costs; what this requires (Middleton)
2. Importance of characterizing cost uncertainty in future studies; how this might be done (Lave)
3. Why tax interaction effects should be included in future cost estimates (Goulder)
4. Need to revise mortality risk estimates; how this could be done (Cropper/Krupnick)
5. Importance of presenting cost-effectiveness results (Cropper/Krupnick)
6. Importance of valuing ecological benefits; promising (and unpromising) approaches (Freeman)
7. Need to estimate exposure and effects of air toxics (Lioy).

Members agreed to provide their initial text and then to review and comment on their colleagues' draft text through the discussion database by October 29, 1999. Dr. Cropper then committed to synthesize the elements into a Letter Report and provide in final form to the Agency by November 10th.

Action item(s):

1. Members provide their text to the DFO or post to the discussion database by October 22, 1999.
2. Members provide comments on their colleagues' draft text through the discussion database by October 29, 1999.

At 1:30 p.m., Dr. Cropper adjourned the meeting.

Respectfully Submitted:

Designated Federal Official

Certified as True:

Chair

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by the Council members and consultants (M/C) to the Agency during the course of deliberations within the meeting. Such ideas, suggestions and deliberations do not necessarily reflect definitive consensus advice from the Council M/C. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters, or reports prepared and transmitted to the EPA Administrator following the public meetings.